VSTL Product Submission Procedure

CONFIDENTIAL AND PROPRIETARY

Hart InterCivic	
Part Number: 1000565	REV: D.01
Part Name: VSTL Product Submission Procedure	
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Change History

| Version	Date	Author	Description
1	7/24/06	██████	Initial Draft
2	9/05/06	██████	Revision
A	9/22/06	████	Initial Release
B	11/14/06	█████	Update for CAR 00029: Rev A procedure is missing description of testing and outputs
C	3/15/07	█████	Updated the "Proprietary and Confidential" statement
D	08/17/2012	█████	Update to current processes
D.01	03/6/2013	Hart InterCivic	Update filenaming and version conventions

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1 PURPOSE

The purpose of this procedure is to outline the steps necessary to submit Hart products to the Independent Testing Authority (ITA) for Federal Voting Systems Certification Testing and Witness Build.

2 REQUIREMENTS

- Volume I and II of the 2002 Voting Systems Standards
- Volume I and II of the 2005 Voluntary Voting Systems Guidelines.

3 FLOW CHART
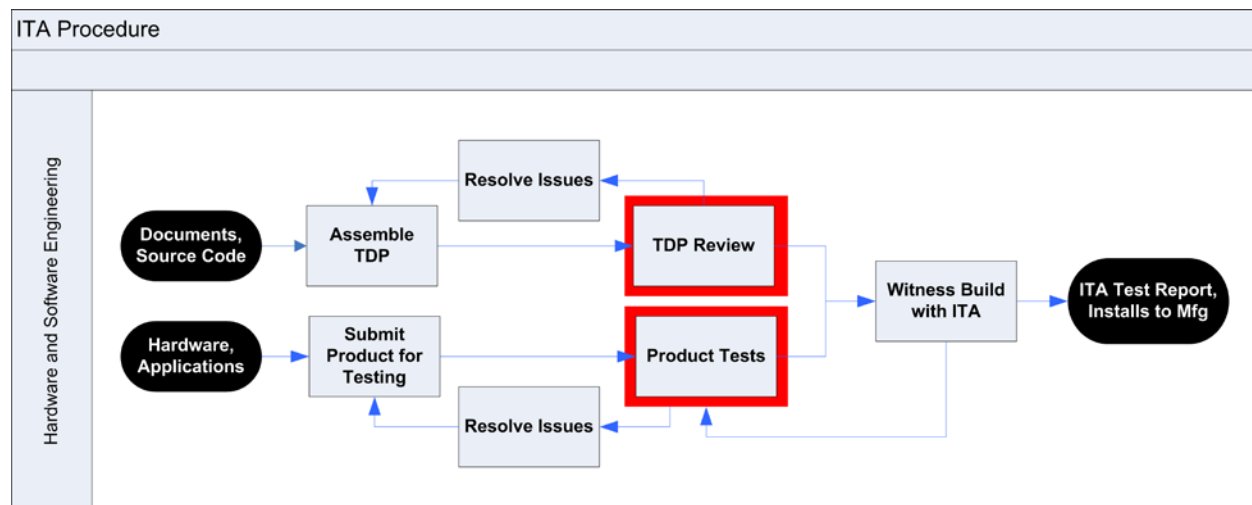
Processes with red background depict outsourced processes.

4 ITA PROCESSES

The ITA, also called a Voting System Test Lab (VSTL), performs independent review and test of product and documentation to verify that our new products meet federal voting system standards. The ITA does this in three parts by: a review of a Technical Data Package (TDP), a set of tests of the voting system and a Witness Build process. Hart prepares for this by assembling the TDP and equipment for Testing and by supporting the Witness Build process.

4.1 TDP Document Assembly

Hart assembles a TDP for the new system to be evaluated by the ITA. The TDP includes 3 main elements: Documentation, Source Code and Application Installs. The many files that make up all elements are assembled by Hart and forwarded to the ITA. All documents that make up the TDP are released and changes tracked via Hart's documentation control system. The Hart staff assembling the TDP may make use of a

network disk drive and multiple folders to organize the documents into a single package to be sent to the ITA via FTP, CD or other method.

4.2   Delivery of Products for Testing

Hart delivers hardware and software product to the ITA for their testing. Hart may deliver multiple units to the ITA for parallel testing. Hart personnel may accompany the product to support the setup and execution of the ITA tests or simply provide phone support as necessary.

4.3   TDP Review & Issue Resolution

Once the ITA receives the TDP they perform the reviews and tests prescribed by the federal standards. If, in the course of these reviews, they observe a discrepancy in the product or documentation, that issue is documented and sent back to Hart for evaluation. If a change to code or documentation is required, Hart will make those changes, document them and send the updated portions of the TDP back to the ITA.

4.4   Product Tests

Upon receipt of the hardware and applications the ITA performs systems, functional, environmental, safety and other tests as required by the federal standards.

4.5   Witness Build Process

Once the ITA has concluded most of the other reviews and tests, they, with assistance from Hart personnel, create an official Witness Build of the product software and firmware. The ITA then creates hash values for each appropriate file and retains copies of the source code, object files and hash values. Final tests are run on the Witness Build applications to ensure that the build was performed correctly. Any issues found may cause Hart personnel to make changes which would be evaluated, documented and re-submitted to the ITA.

The software outputs (executables and install files) of the Witness Build become the official controlled source for all production of the new product firmware and applications.

4.6   Outputs from the ITA Procedure

At the conclusion of the ITA process, the ITA produces a test report which is sent to the federal certification authority. The ITA retains the TDP and the outputs of the Witness Build process for later use if authentication of the product becomes necessary.